PI-95-0100

April 13, 1995

Mr. Donald R. Linger
Vice President, Transmission
Algonquin Gas Transmission Company 1284 Soldiers Field Road
Boston, MA 02135

Dear Mr. Linger:

This responds to your letter of April 13, 1995, which expresses Algonquin's views on two methods for determining boundary adjustments for class locations under 49 CFR § 192.5(f). Your letter also provides information from a poll of nineteen interstate gas pipeline operators pertaining to their understanding of § 192.5.

You agree that the "perpendicular/parallel method" described in my letter to you of January 30, 1995, complies with the requirements for determining location end points for clusters. But, yon; also believe that the "arc method," not considered in my letter, also complies with the language and intent of § 192.5(f).

To illustrate the validity of the "arc method" (using an arc intercept), your letter includes a sketch showing a "hypothetical scenario" of the two methods as they apply to two groups of 46 buildings located on one side of a gas pipeline. The group containing Building "A" is identified as a cluster. For your information, I have enclosed a copy of that sketch (with handwritten revisions) to illustrate the following observations:

(1) Under the "arc method" an operator would install 36 feet of Class 3 pipe and 623 feet (659-36 = 623 feet) of the thinner wall Class 2 pipe. However, under the "perpendicular/parallel method" an operator would install 659 feet of the thicker wall Class 3 pipe. Nevertheless, with expanding urbanization, the cluster with Building "A" would probably be closer to the pipeline than the hypothetical scenario in your sketch. Such a scenario has been added to the sketch to illustrate that the length of Class 3 pipe, determined by the "arc method," would approach the length determined by the "perpendicular/parallel method."

(2) Since § 192.5 applies only to buildings that are wholly or partially inside the class location unit corridor, there is no need for a minimum distance between the extremities of Building "A" and Building "B," because the 661 foot distance to Building "B" excludes, by one foot, Building "B" and other buildings in that group.

We have looked into your statement on the extent of use of the "arc method" and find that it has been used for many years by a large number of interstate gas operators. Consequently, we have reconsidered our interpretation in my letter of January 30, 1995, and find both the "arc method" and the "perpendicular/parallel method" to be acceptable for determining the 220 yard boundary for the cluster of buildings in § 192.5(f).

If you have any further questions, please contact me or Albert Garnett, of this office, at (202) 366-2036.

Sincerely,
Cesar De Leon
Deputy Associate Administrator for Pipeline Safety

Algonquin Gas Transmission Company
1284 Soldiers Field Road
Boston, Massachusetts 02135

April 13, 1995

Mr. Cesar DeLeon, PE
Acting Associate Administrator for Pipeline Safety
DOT/RSPA/Office of Pipeline Safety 400 Seventh Street, SW
DPS-24
Washington, DC 20590

Dear Mr. DeLeon:

I have reviewed your letter dated January 30, 1995 regarding class location boundaries for clusters of buildings and I appreciate your response. Algonquin Gas Transmission Company ("Algonquin") agrees that the method of determining class location end points for clusters as described in your letter is a correct means of defining boundaries. However, it is not the only method allowed by the language of 49 CFR 192.5(f)(1), (2), (3) nor is it the only method used by pipeline operators throughout the country. Please let me elaborate.

The method of striking an arc with a radius of 660 feet (220 yards) from each of several buildings near the end of a cluster of buildings and selecting the most distant arc intercept with the pipeline also complies with the language and, I believe, the intent of the regulation. Nineteen interstate gas pipeline operators were recently polled to determine the methods used for determining class location boundaries for clusters. All nineteen agreed that the arc method compiles with §192.5 (class locations). In fact, this method has been used by pipeline operators since Part 192 was enacted. To declare the arc method out of compliance after twenty-five years of use could bring chaos to pipeline operators throughout the country and may require millions of dollars in pipe replacements, all without enhancing the safety of the pipelines or the public.

To illustrate the validity of the arc method, please consider the following hypothetical scenario:

1. A cluster consists of forty-six buildings.

2. The end building of the cluster (Building A) is 659 feet from the pipeline.

3. Another building (Building B) is located 659 feet down the pipeline from Building A, but it and forty-five other buildings are 661 feet from the pipeline, thus not within the 220 yard corridor and not a consideration in the class location.

Using the perpendicular/parallel method described in your letter, Building A is 932 feet from the end of the "class 3 pipe" while Building B is 661 feet from the same point. It is not logical to require "class 3 pipe" 932 feet from one building while not considering the other buildings 661 feet from the pipeline. If 220 yards is a meaningful distance from a point on the pipeline in a perpendicular or parallel distance, it is also meaningful in a diagonal distance. Simply put, 220 yards is 220 yards. Using the arc method to determine the end of the cluster, the end point of the "class 3 pipe" could be only a foot Q,E,69 downstream of Building A depending upon the proximity of the other forty-five buildings. This would eliminate the requirement for 659 feet of "class 3 pipe" resulting in substantial savings to the operator without decreasing the safety of the public. Refer to attachment A for illustration of this scenario. Admittedly, this is an extreme example but it is possible and entirely probably with housing developments or strip malls lying parallel to a highway or thoroughfare.

To further elaborate, please consider the relevant text of §192.5. Some phrases are underlined for emphasis.

§192.5 Class locations

(a) Offshore is Class 1 location. The Class location onshore is determined by applying the criteria set forth in this section: the class location unit is an area that extends 220 yards on either side of the centerline of any continuous 1-mile length of pipeline. Except as provided in paragraphs (d)(2) and (f) of this section, the class location is determined by the buildings in the class location unit. For the purposes of this section, each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

(b) A Class 1 location is any class location unit that has 10 or less buildings intended for human occupancy.

(c) A Class 2 location is any class location unit that has more than 10 but less than 46 buildings intended for human occupancy.

(d) A Class 3 location is:

(1) Any class location unit that has 46 or more buildings intended for human occupancy; or

(2) An area where the pipeline lies within 100 yards of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. (The days and weeks need not be consecutive.)

(e) A Class 4 location is any class location unit where buildings with four or more stories above ground are prevalent.

(f) The boundaries of the class locations determined in accordance with paragraphs (a) through (e) of this section may be adjusted as follows:

(1) A Class 4 location encr220 yards from the nearest building with four or more stories aboveground.

(2) When a cluster of buildings intended for human occupancy requires a Class 3 location, the Class 3 location ends 220 yards from the nearest building in the cluster.

(3) When a cluster of buildings intended for human occupancy requires a Class 2 location, the Class 2 location ends 220 yards from the nearest building in the cluster.

[35 FR 13257, Aug. 19, 1970, as amended by Amdt. 192-27, 41 FR 34605, Aug. 16, 1976; Amdt. 192-56, 52 FR 32925, Sept. 1, 1987]

The preamble concerning §192.5 addresses boundary definitions with slightly different wording. This wording that "...the boundary may be moved to within 220 yards of the nearest building..." also supports the arc method. Consider the following language in the preamble to Part 192.

...A Class 4 location boundary may be moved to within 220 yards of the nearest four-story building. Whenever a Class 2 or 3 location is required by a cluster of buildings in otherwise open country, the boundary may be moved to within 220 yards of the nearest building in the cluster.

As you can clearly see from the hypothetical scenario, safety is not compromised by using the arc method. Further, the arc method is consistent with the language of the preamble and the regulations. Requiring pipeline operators to revise their method of determining class location boundaries after twenty-five years would cause great financial hardship without enhancing safety. Please consider the appropriateness of this method in addition to the method in your letter requiring boundaries to be set using the perpendicular/parallel method. I would welcome further discussion if you have any questions regarding the foregoing.

Thank you for taking the time to review this information. I look forward to your response.

Sincerely,
Donald R. Linger
Vice President, Transmission

January 30, 1995

Mr. D. R. Linger
Vice President, Operations
1284 Soldiers Field Road
Boston, MA 02135

Dear Mr. Linger:

This responds to your letter of June 30, 1994, to Mr. Donald Moore of our Central Region office, regarding his interpretation of 49 CFR § 192.5 (Class locations.) made in the course of the recent New Jersey Audit. Mr. Moore's establishment of the class change end points for a cluster of houses is inconsistent with your understanding of the requirements for clusters in § 192.5(f).

Your position appears to be based on a misinterpretation of "ends 220 yards from the nearest building" as that phrase is used in paragraphs (f)(1) - (f)(3). These paragraphs use "building" in the singular because they refer to the nearest building in the group or cluster to which the boundary adjustment of 220 yards applies in relation to the other buildings intended for human occupancy. As such, the two boundary adjustments are measured along the centerline of the pipeline, beginning at points which are the perpendicular projection of the extremities of the furthermost upstream building and furthermost downstream building.

Accordingly, your agreement to extend the two designated pipeline segments, to conform with Don Moore's interpretation, will put them in compliance with § 192.5

We trust that this responds to your request for a resolution of the interpretation issue by this office.

Sincerely,
Cesar De Leon
Deputy Associate Administrator for
Pipeline Safety

Algonquin Gas Transmission Company
1284 Soldiers Field Road
Boston, Massachusetts 02135

June 30, 1994

Mr. Donald Moore
Department of Transportation
Office of Pipeline Safety.
Kansas City Regional Inspection Office
911 Walnut Street - Rm. 1811
Kansas City, MO 64106

Re: New Jersey Audit
Request for Information:

Dear M. Moore:

Algonquin Gas Transmission Company ("Algonquin") is an interstate natural gas transmission company operating approximately one thousand miles of pipeline and related facilities in the Northeast. We are committed to the safe operation and maintenance of our facilities in this highly developed area of the country and take great pride in our safety record. Accordingly, we take great interest in the results of the New Jersey facilities audit and want to resolve any concerns that develop.

During your recent inspection of our class location and determination files, you requested that we provide a response to your request to extend the class change endpoints. It is our understanding that in your interpretation, the end of a class location change due to a cluster of houses stops 220 yards from a point on the pipeline that is perpendicular to the outermost house in the cluster, regardless of that house's distance from the pipeline. This interpretation does not appear consistent with the requirements of 49 CFR Part 192 (the "Code") as defined in § 192.5 of the Code. Paragraph (a) of § 192.5 specifies that the "class location unit is an area that extends 220 yards on either side of the centerline of any continuous 1-mile length of pipeline," Paragraph (f) provides that the boundaries of the class location may be adjusted when a cluster of buildings requires a Class 2 or 3 location and that the "class [2 or 3] location ends 220 yards from the nearest building in the cluster." The foregoing definitions of class location are quite clear and do not comport with our understanding or your interpretation.

The Code clearly defines a distance from the area of the buildings to the end of the class location change. This distance is definitive and is directly related to the proximity of the buildings to the pipeline and the end of the class location change.

It is not supplemented by an arbitrary distance related to the perpendicular relationship of the outermost building in the cluster and the pipeline. The application of this interpretation could theoretically require class location changes for buildings which are more than 220 yards off the pipeline. In this light, we do not support this interpretation nor its application.

In order to fulfill our existing service obligations to our customers while this issue is being resolved, Algonquin will extend the two specific sections you have designated in conjunction with some work we are performing on a. nearby section of the pipeline this summer. These extensions will then meet the criteria set forth in your interpretation of the Code.

While our agreement to extend these specific endpoints may mitigate the compliance concern generated by your interpretation, such is not to be deemed as an admission of non-compliance nor is such to be continued as a waiver of any rights or defenses Algonquin may have with respect to this issue. Clearly there is a significant difference of opinion on the requirements of the Code in this area and such needs to be resolved. To that end, Algonquin requests that this issue be raised to the national level for discussion.

Please contact us to arrange further discussion on this matter. We look forward to hearing from you and working with you to resolve this issue.

Sincerely,
D. R. Linger, Vice President
Operations